

REMARKS

Claims 1-6, 8-11 and 13-20 are pending in the case. The Examiner's reconsideration of the rejections is respectfully requested in view of the amendments and the remarks.

Applicants appreciate the Examiner's indication that claims 14-19 are allowed and that 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1 and 20 have been rejected under 35 U.S.C. 102(b) as being anticipated by Baumhauer, Jr. et al. (USPN 5,515,445). The Examiner stated essentially that Baumhauer teaches all the limitations of claims 1 and 20.

Claims 1 and 20 have been amended to include the allowable limitations of claim 7. Therefore, claims 1 and 20 are believed to be in condition for allowance. The Examiner's reconsideration of the rejection is respectfully requested.

Claims 10-13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Ngo et al. (USPN 5,694,474) in view of Feng et al. (US Patent Application 2001/0031053). The Examiner stated essentially that the combined teachings of Ngo and Feng teach or suggest all the limitations of claims 10-13.

Claim 10 claims, *inter alia*, "a calibration module for normalizing gain levels between a plurality of channels on each of a plurality of date frames, wherein each data frame is expressed in terms of time, wherein the calibration module compensates the plurality of channels for attenuations at the microphones in a time domain; and a delay parameter estimation module for accepting an output of the calibration module

comprising the normalized and compensated channels, and estimating a delay parameter for a plurality of data frame sizes over a plurality of lag times, and sorting delays to generate corresponding source separated outputs”

Ngo teaches a method for determining a direction of arrival of a signal using delay values for a direct signal separator (see Abstract). Ngo does not teach or suggest, that a “calibration module compensates the plurality of channels for attenuations at the microphones in a time domain”, as claimed in claim 10. Ngo uses only delay characteristics of a signal for determining a direction of arrival. Nowhere does Ngo teach or suggest a calibration module for compensating a channel for attenuation. Therefore, Ngo fails to teach that a “calibration module compensates the plurality of channels for attenuations at the microphones in a time domain”, as claimed in claim 10.

Feng teaches the localization and extraction of acoustic signals, including delaying signals to determine intermediate signals and determining noise source locations from the intermediate signals (see Abstract). Feng does not teach or suggest, a calibration module “wherein the calibration module compensates the plurality of channels for attenuations at the microphones in a time domain” as claimed in claim 10. Feng teaches the attenuation of interference (see paragraph [0129]). Attenuation of interference is not analogous to compensation of channel attenuation, essentially as claimed in claim 10. For example, Feng reduces or attenuates interference; a reduction in interference does not teach or suggest compensating a channel for attenuation. Further, Feng’s attenuation of interference is performed in a frequency domain (see paragraph [0129]). Feng’s attenuation is not in a time domain as claimed in claim 10. Therefore, Feng fails to teach

that a “calibration module compensates the plurality of channels for attenuations at the microphones in a time domain”, as claimed in claim 10.

The combined teachings of Ngo and Feng teach how to determine a direction of a signal using delays. The combined teachings of Ngo and Feng do not teach or suggest that a “calibration module compensates the plurality of channels for attenuations at the microphones in a time domain”, as claimed in claim 10. Therefore, the combined teachings of Ngo and Feng fail to teach or suggest all the limitations of claim 10.

Claims 11 and 13 depend from claim 10. The dependent claims are believed to be allowable for at least the reasons given for claim 10. Claim 12 has been cancelled. The Examiner’s reconsideration of the rejection is respectfully requested.

For the forgoing reasons, the present application, including claims 1-6, 8-11 and 13-20, is believed to be in condition for allowance. The Examiner’s early and favorable action is respectfully urged.

Respectfully Submitted,

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Donald B. Paschburg
Reg. No. 33,753
Attorney for Applicants

Mailing Address:
SIEMENS CORPORATION
Intellectual Property Department
5th Floor
170 Wood Avenue South
Iselin, New Jersey 08830
(732) 321-3191
(732) 321-3030 (FAX)